

An early description and illustration of Blue Mountain Vireo *Vireo osburni*

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SUMMARY.—An early description and illustration of Blue Mountain Vireo *Vireo osburni*, dating from the 1760s, were located in a manuscript held in the Institute of Jamaica. The text and illustration pre-date (by almost 100 years) the original description published in 1861, when the species was named *Laetes osburni*. The species posed a problem for taxonomists until 1934, when James Bond proposed that it be treated as a *Vireo*, where it has remained ever since. I describe those features that accurately identify the early description to species.

Jamaica's endemic Blue Mountain Vireo *Vireo osburni* was described in 1861 by Sclater and named for Lieutenant W. Osburn, RN, who collected four specimens in the parish of Trelawny. However, recently examined 18th-century folios, *The natural subjects of Jamaica* by Dr Anthony Robinson, include an illustration and a description of *Vireo osburni*. Robinson's account pre-dates the formal taxonomic description by nearly 100 years and probably is the first-ever narrative account and illustration of the species.

Robinson was a well-trained botanist as part of his professional medical training. Although the date of his birth is unknown, it was probably c.1719 as Thomas Thistlewood (1721–86) wrote 'He was not much older than me' (Thistlewood 1750–86). However, Robinson died in 1768 leaving copious, disjointed notes, which were then transcribed and placed into some order by Robert Long in 1769, as noted on the manuscript: 'This [is a] faithfull transcript of Mr. Robinson's loose unconnected and detached papers, by Rt. Long, who has revised the whole and corrected the errors of copyists thro-out. Sepr., 1769. Anthony Robinson Chirurgion formerly of Sunderland by the Sea in Durham but lately of Jamaica MS vera Copia corrigata de Roberto Long Arm^{vv}'. As Edward Long (1789) recorded, Robinson died while undertaking further natural history research: 'it was in attempting to perfect the discovery of a tree balsam, analogous in quality to the celebrated balsam of Mecca, that he underwent a fatigue so excessive as to occasion the disorder of which he died.'

Information from the manuscripts was used by several authors in the 18th and 19th centuries, e.g., Edward Long in *The history of Jamaica* (1774), Dr Dancer in *The medical assistant* (1801), Lunan in *Hortus Jamaicensis* (1814) and Bridges in *The annals of Jamaica* (1827). Subsequently, they were consulted by P. H. Gosse who clearly trusted Robinson to be a reliable natural historian. In his Jamaican diary, Gosse (1844–46) recorded that he was able to borrow Robinson's manuscripts from the (now defunct) Jamaica Society of Arts, via the goodwill of Richard Hill. Although Gosse did not encounter *Vireo osburni* while in Jamaica, readers familiar with his *Birds of Jamaica* will recognise Robinson's name as Gosse quoted extensively from his notes.

Subsequent to their use by Gosse, the manuscripts disappeared, only to reappear in 1879 in the newly formed Institute of Jamaica. In 1920, at the request of William Fawcett, Director of Public Gardens in Jamaica (1887–1908), those folios containing botanical information, along with the illustrations, were loaned to the British Museum (Natural

History), London, to assist with the preparation of Fawcett & Rendle's *Flora of Jamaica*. The volumes were returned to the Institute of Jamaica in 2009.

Those volumes of Robinson's notes sent to the British Museum (Natural History) were nos. 1, 2, 4, 5, together with a small unnumbered volume (apparently there was no vol. 3), and two large volumes of botanical illustrations. Lying unnoticed in the National Library of Jamaica was a large folio of 162 bird illustrations and a manuscript of notes. The illustration (Fig. 1) of *Vireo osburni* is in MS 178 vol. 1, no. 88 in the National Library of Jamaica. The text, however, is in a volume loaned to the British Museum, MSS. 090 ROB, vol. 5, book 3, now in the Natural History Museum of Jamaica. All of the bird illustrations are mounted on 53 × 35.56 cm board, a few covering the entire space, some painted, and others unfinished or only sketched. There are 162 illustrations, approximately 125 executed by Robinson, some by E. Long (acknowledged with Robinson's assistance), some by A. Mackey and 11 by Andrew Peter Dupont (*d.* 1770).

Robinson's description

Robinson did not assign a species name to the bird because he did not recognise it in existing sources to which he had access, e.g. Linnaeus, Sloane, Edwards, Browne and Catesby, but assigned it to the genus *Lanius*, reflecting the shrike-like bill of his unknown bird.

'This bird weigh'd 5 drachmas 24 Gr^{ms}. The extended Wing nine Inches & half, the closed Wing 3 inches. The Beak six-eighths of an Inch long & a half & moderately arcuated [curved]. The upper Mandible had a narrow Ridge between the Nostrills and a Dent on each Side near the Tip. The Nostrills were two small oval Apertures having no Seta about them. The Base of the Beak as in the Baristi [tyrannids] or Loggerhead Genus.

The Young sagittated and lacerated. The Tail has ten equal Feathers of a brownish blue edged with green. Beneath of a whitish green where all the Shafts were white. The Throat, Breast, and Belly Sides and Anals were of a dull yellow. The Thighs greenish yellow. The Quill plumes resembl'd those of Tail in color. The Rump, Back, Coverts, and Neck's hind part were dull green as was the Head except its being of a duller hue. The Legs were barely 3/4 of an Inch long. The Back Toe has a narrow membrane on each side and the Middle Toe adher'd to the outer from the first to the second joint. The Legs were cover'd with pale Leaden color'd Scales and the Feet with white ones. This is a true Species of the Lanius or Butcher Bird and the only one of the kind I have ever seen in Jamaica. I had it from Miss Elizabeth Baker my very good Friend Mr. Baker's Daughter. One of her Negro Boys knocked it down with a stone near Chestervale in New Liguanea Mountains. The Eyes were small I know not of what color the Irides. The Head large more elevated than those of the Baristi whose Heads are broad and depressed.'

The vireo illustration, cut from its original paper, measures 20.64 × 18 cm, and is painted in watercolours with fine pen strokes. The label is 2.86 × 11.43 cm and reads 'Lanius superne virescente inferne flavo. See posth. M.S. under omissions'. There is a very small diamond shape measuring 0.476 × 1.9 cm pasted onto the label, which was apparently added by Robert Long, who had the notes transcribed and Robinson's illustrations assembled.

On the reverse side of each illustration is written the species name, no. 88 being labelled *Lalates osburni*. These were evidently added in the latter part of the 19th century as some corrections are in the hand of ornithologist Edward Newton, Lieutenant-Governor and



Figure 1. Anthony Robinson's watercolour of *Vireo osburni*, labelled 'Lanius superne virescente inferne flavo'; the inset shows the short outermost primary (© National Library of Jamaica, Kingston)

Figure 2. *Vireo osburni*, Hardwar Gap, Jamaica, 2009, showing the 'compressed, deeply toothed bill' (© Paul B. Jones)

Figure 3. Pl. XIV in Sclater (1861) showing *Vireo osburni* [*Laietes osburni*], with Jamaican Vireo *V. modestus* above.

Figure 4. Right wing of *Vireo osburni* showing the short first primary (© Susan Koenig)

Colonial Secretary in Jamaica, 1877–83. It is probable that this is whom Cockerell (1894) was referring when he wrote 'not long ago it was debated whether the ornithological observations (of Robinson) should not be issued by the Institute, accompanied by a selection from the colored drawings. This project after consultation with an experienced ornithologist was abandoned.'

It is obvious that Robinson received the bird some time after it had been collected and did not observe it alive as he noted that he was unable to discern the colour of the iris, and

recorded that the 'eyes were small'. On the contrary, in life, the eyes are relatively large, and the iris is brown. Furthermore, the length of the wings compared to the tail and the apparently short outer primary, plus the accurate description of the bill, and the plumage colours are unmistakably those of *Vireo osburni*. Additional evidence that he did not see the bird alive is that the 'jizz' of the bird in the illustration is quite unlike the species' usual posture, which is more hunched and rarely stretched upwards like Robinson's illustration.

Osburn's description (1859)

Lieutenant W. Osburn, RN, visited Jamaica and collected birds in 1859–60. Having read Gosse's *The birds of Jamaica* and *A naturalist's sojourn in Jamaica*, Osburn communicated several observations that he considered of interest. In a letter to Gosse, subsequently published in *The Zoologist* (1859), Osburn mentioned a bird not described in any of his books: 'A second bird, rather abundant in this district, and not included in your list, is a sober-suited olive-coloured little fellow, that keeps pretty much to the higher branches of lofty trees, though I have not unfrequently met with it on less elevated positions. From its strong, compressed, deeply toothed bill [cf. Fig. 2], I was at first inclined to suppose it might belong to Mr. Swainson's extensive genus *Thammophilus* [antshrikes]; but better acquaintance with its habits and structure has convinced me that it should probably be classed among his *Ampelidae* [waxwings], and somewhere near *Pteruthius* [Old World shrike-babblers] perhaps, though I am unable to refer it satisfactorily to any of his genera ...'.

'...the head is a gray dubious olive, which becomes greener on the back. The quills and tail smoky black, with olive edges and the under parts dingy yellow. But its chief characteristics are the disproportionate size and thickness of the head, which seems only owing to the arrangement of the feathers, for it would not be suspected from the dried skin.... The gray-blue of the beak is singularly in contrast with the prevailing tints of the plumage. The bird is tame and fearless, and, if perching low, may be easily approached; and is another of the lovers of profound solitude in the forest... They hunt insects with considerable bustle. It will give an idea of their movements if I add that on shooting them at great heights I mistook, before firing, one of them for *Vireosylva*, and the other for *Sylvicola pharetra* [Arrowhead Warbler *Setophaga pharetra*]... The stomachs contained several large seeds, a plant-bug, elytra of beetles, &c.'

Sclater's description (1861)

Osburn died in Jamaica, but his brother Henry sent the collection of birds to P. L. Slater of the British Museum, who published the type description of the new genus and species, *Lalates osburni* (see also Fig. 3). Slater's (1861) account reads: 'Mr. Osburn's collection contains four examples of this bird, labeled 'Olive Chatterer' and obtained at Freeman's Hall, Trelawny, in the months of January and April 1859. Comparing it with *Vireo flavifrons* [Yellow-throated Vireo], which it exceeds by rather more than half an inch in total length, we find the beak more compressed and Shrike-like, and nearly similar to that of *Vireolanis pmlchellus* [Green Shrike-Vireo], only shorter. The wings are much shorter in proportion than *Vireo flavifrons*, and the first spurious primary if well developed, measuring about three-quarters of an inch from its insertion.'

It is noteworthy that independently of Robinson's 18th-century notes which he could not have examined, Slater also described the bill as 'shrike-like'. His description reads 'rostrum altius, fortius, compressius quam in *Vireolanio*'. Furthermore, in describing the

bird, Sclater remarked 'remige externo spurio presente', as also noted by Baird (1864). In Robinson's illustration the 'spurious' primary is clearly visible (Fig. 1, cf. Fig. 4).

Vireo osburni

Vireos had not been described in Robinson's lifetime. Linnaeus first designated them '*Muscicapa*' (flycatchers) because '*Lanius*' was occupied. Vieillot (1807) introduced *Vireo* as a genus name, using it for *Vireo flavifrons*. As he emphasised, Sclater (1861) did not believe *osburni* belonged to this genus, '*Laletes* genus novum Vireonidarum, inter Vireonem et Vireolanium medium.'

Thereafter, Albrecht (1862) translated Sclater's account into German, while Gray (1869) referred to it as *Cyclarhis Osburni*. Baird (1864) described the family Vireonidae (one of the three denticulate families, the others being Ampelidae and Laniidae) writing 'The essential features of this family appear to consist in the combination of the denticulate bill, notched in both mandibles; the ten primaries... of which the outer is usually from one-fourth to one-half the second; the rather short, nearly even tail with narrow feathers, and the great amount of adhesion of the anterior toes...'. Subsequently, Cory (1886) again treated the species under the name *Laletes osburni*, as did Ridgway (1904). However, Bond (1934) proposed that *osburni* is a *Vireo*, in which genus it has remained since. He remarked, 'It is my opinion that *Laletes* is merely the Jamaican representative of a group of Antillean vireos, its closest relative being *V. gundlachi* [Cuban Vireo] of Cuba.'

Distribution

Robinson's specimen (now lost) was taken near Chestervale, St. Andrew, (c.1,070 m) in the Blue Mountains, but the species is not restricted to this region or to higher altitudes, as noted by Lack (1976). *V. osburni* is widespread in moist forest (e.g. Cockpit Country, Mount Diablo and the Blue and John Crow Mountains), and has been observed at lower altitudes, such as Windsor, Trelawny (110 m). During data collection for the Important Bird Areas Programme, the largest concentration of *V. osburni* was in core Cockpit Country, where counts were nearly double those in the Blue Mountains, followed by Litchfield Mountain / Matheson's Run (eastern Cockpit Country), the John Crow Mountains, Mount Diablo and western Cockpit Country. Thus, the name 'Blue Mountain Vireo' will confuse those visiting or living elsewhere in Jamaica.

Osburn collected it in Trelawny, one of the centre-west parishes of Jamaica—the location of the type specimens, not in the Blue Mountains in the east of the island. Bond (1936) said it was 'Confined to high elevations (above 1500 ft.) in Jamaica. Most numerous in the Blue Mountains.' One presumes that Bond, in visiting Jamaica, saw the bird more commonly in the Blue Mountains, or perhaps he did not visit other areas as frequently.

Conclusion

It is little wonder Robinson had difficulties assigning a name to this enigmatic bird. As long ago as 1894, T. D. A. Cockerell (then curator of the Natural History Museum of Jamaica) said of Robinson's manuscripts and illustrations, 'Had these descriptions been published when Dr. Robinson wrote them, their value would have been very different'.

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